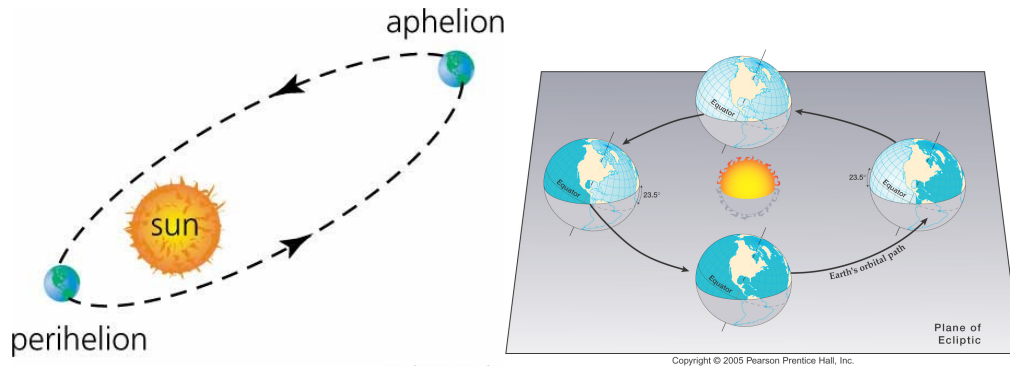


Seasons Lab Questions

Due November 14th, 2016 to your UofIBox folder

Earth's orbit around the Sun is slightly elliptical. At certain times during the year, Earth is a little closer to or farther from the Sun than at other times. Also, Earth is tilted as it moves around the Sun.



- a. Come up with a hypothesis stating why you think the seasons occur.

Do you think they are caused by changes in Earth's distance from the Sun? Do you think Earth's tilt causes the seasons? Do you think both of these factors play a role? Or do you think other factors cause the seasons?

- b. Using a flashlight, measure the area illuminated by a flashlight as a function of tilt angle from 0° (straight up) to 47°. Next, measure the area as a function of distance. Next, measure the area as a function of distance. By what factor must you increase the distance in order to achieve the same increase in area you got when going from 0 to 47°?

Tilt Angle	0°	25°	47°
Area			